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EXAMINER
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MEUCCI, MICHAEL D

ART UNIT	PAPER NUMBER
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2142

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/844,340

Applicant(s)

TAPPERSON, KEVIN GARY

Examiner

Michael D. Meucci

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16, 18-34 and 36-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18-34 and 36-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**BEST AVAILABLE COPY****Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This action is in response to the request for reconsideration filed 06 December 2005.

#### ***Response to Amendment***

2. Examiner acknowledges amendments made to claims 9-12, 16, 27-30, and 34 to overcome 35 U.S.C. 112, second paragraph rejections. These rejections have been withdrawn.
3. Examiner acknowledges the cancellation of claims 17 and 35.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1-5, 7, 9-14, 16, 20-24, 26-32, 34, and 38-39 rejected under 35 U.S.C. 103(a) as being unpatentable over Endicott et al. (U.S. 6,047,295) hereinafter referred to as Endicott in view of Howes et al. (U.S. 6,366,558 B1) hereinafter referred to as Howes and de la Salle (U.S. 5,878,420).

- a. As per claims 1, 20, and 38, Endicott teaches: establishing a connection to a server (lines 33-37 of column 5); maintaining a normal reference to an object (lines

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31-34 of column 1); and periodically destroying objects maintained by weak references (lines 24-33 of column 3).

Endicott does not explicitly teach: starting a timer responsive to conclusion of a communication process using the connection; and responsive to conclusion of a predetermined time period measured by the timer, maintaining a weak reference to the connection object. However, Howes discloses: "The timer field is used to time out a connection object when no activity occurs on the connection for a specified period of time," (lines 10-12 of column 14). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to start a timer responsive to conclusion of a communication process using the connection; and responsive to conclusion of a predetermined time period measured by the timer, maintain a weak reference to the connection object. "While the standby Local Director is inactive, it does not handle packets for connections and so none of the connection object timers in the standby Local Director are updated when connection activity occurs. Thus, many of the connection objects on the standby Local Director would be timed out. By updating the timer field to the current time when the standby Local Director becomes active, the connection objects are all preserved and are not timed out until a time out period expires beginning from the time that the standby Local Director becomes active," (lines 12-23 of column 14 in Howes). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to start a timer responsive to conclusion of a communication process using the connection; and

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responsive to conclusion of a predetermined time period measured by the timer, maintain a weak reference to the connection object in the system as taught by Endicott.

Endicott does not explicitly teach: a connection object. However, de la Salle discloses: "In order to create the connection object 80, the transport decode routine 90 utilizes a hash table based on a pair of matched endpoint addresses appearing in the same captured packet 22'. These can either be a pair of network addresses 23 or a pair of board addresses 36'. The connection object 80 is an identified and separately "named" (numbered) object representing a link between two defined endpoints. For example, a particular captured packet 22' may involve a print spool request from Joan's PC (24) to a printer control server (32), designating an item for printing on an associated dot matrix printer. A connection object 80 would then be created and identified ("named") which would indicate a "connection" between Joan's PC and the printer server," (lines 28-50 of column 8). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a connection object as the object. "A later captured packet 22' could include a further print request traveling along the same path 18 as before from Joan's PC to the printer server, with either the same designated printer, or, say, a laser printer. In this case a separately named connection object 80, with essentially identical content, other than the name, would be created to memorialize a second "connection" between the same two endpoints. Sorting and counting of these objects is performed at the level of the database builder aspects of the analysis assembly, so each of these separate objects is simply stored in the buffer 44 until called for," (lines 50-61 of column 8 in de la Salle). It is for this reason that one of

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ordinary skill in the art at the time of the applicant's invention would have been motivated to utilize a connection object as the object in the system as taught by Endicott and Howes.

b. As per claims 2 and 21, Endicott teaches: determining whether a normal reference to the connection object exists (lines 43-52 of column 7); and reusing the connection if the normal reference exists (lines 35-47 of column 10).

c. As per claims 3 and 22, Endicott does not explicitly teach: restarting the timer. However, Howes discloses: "In a step 930, the timer field is updated in all of the connection objects on the newly active Local Director. The timer field is used to time out a connection object when no activity occurs on the connection for a specified period of time (lines 8-12 of column 14). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to restart the timer. "By updating the timer field to the current time when the standby Local Director becomes active, the connection objects are all preserved and are not timed out until a time out period expires beginning from the time that the standby Local Director becomes active," (lines 18-23 of column 14 in Howes). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to reset the timer in the system as taught by Endicott.

d. As per claims 4, and 23, Endicott teaches: determining whether a weak reference to the connection exists (lines 30-39 of column 2, lines 43-47 of column 7, and line 48 of column 10 through line 2 of column 11); determining whether the connection object has been destroyed if the weak reference exists (lines 47-52 of

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column 7 and lines 44-47 of column 14); reusing the connection if the connection object has not been destroyed (line 48 of column 10 through line 2 of column 11 and lines 33-50 of column 14).

e. As per claims 5 and 24, Endicott does not explicitly teach: restarting the timer. However, Howes discloses: "In a step 930, the timer field is updated in all of the connection objects on the newly active Local Director. The timer field is used to time out a connection object when no activity occurs on the connection for a specified period of time (lines 8-12 of column 14). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to restart the timer. "By updating the timer field to the current time when the standby Local Director becomes active, the connection objects are all preserved and are not timed out until a time out period expires beginning from the time that the standby Local Director becomes active," (lines 18-23 of column 14 in Howes). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to reset the timer in the system as taught by Endicott.

f. As per claims 7 and 26, Endicott teaches: sending notification to the server that the connection object is unreferenced when a weak reference to the connection object is maintained (line 66 of column 6 through line 15 of column 7).

g. As per claims 9-10 and 27-28, Endicott teaches: the client is a client Java Virtual Machine; the server is a server Java Virtual Machine (lines 36-42 and lines 54-62 of column 6).

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h. As per claims 11-12 and 29-30, Endicott teaches: the client Java Virtual Machine and the server Java Virtual Machine reside on the same host machine (lines 30-45 of column 5, lines 36-42 and lines 54-62 of column 6).

i. Claims 13, 31, and 39 contain similar limitations as claims 4 and 23 above and are rejected under the same rationale.

j. As per claims 14 and 32, Endicott teaches: destroying the connection object responsive to garbage collection by the server (lines 46-67 of column 3).

k. As per claims 16 and 34, Endicott teaches: the connection object is a Java object (lines 56-59 of column 5 and lines 36-42 of column 6).

6. Claims 6, 15, 25, and 33 rejected under 35 U.S.C. 103(a) as being unpatentable over Endicott, Howes, and de la Salle as applied to claims 4 and 23 respectively above in view of Official Notice.

Official Notice taken of establishing a new connection if the connection object has been destroyed. A connection object is implicitly *new* if the previous connection object was destroyed. Establishing a new connection if the connection object has been destroyed is very well known in the art at the time of the applicant's invention. It would have been obvious for one of ordinary skill in the art at the time of the applicant's invention to establish a new connection if the connection object has been destroyed in the system as taught by Endicott.

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7. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Endicott, Howes, and de la Salle as applied to claim 1, in view of Wollrath et al. (U.S. 5,832,529) hereinafter referred to as Wollrath.

As per claim 8, Endicott teaches: destroying the connection object in response to garbage collection (lines 1-4 of column 2 and lines 46-67 of column 3). Endicott does not explicitly teach: garbage collection is done by a server. However, Wollrath discloses: "The server call processor also initiates a garbage collection cycle," (lines 20-21 of column 7). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to have a server do the garbage collection. "The server call processor also initiates a garbage collection cycle to reclaim resources for which it determines that either no more references are being made to the resource or that the agreed lease period for the resource has expired," (lines 20-23 of column 7 in Wollrath). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to have a server do the garbage collection in the system as taught by Endicott.

8. Claims 18, 36, and 40 rejected under 35 U.S.C. 103(a) as being unpatentable over Endicott, Howes, and de la Salle in view of Geise et al. (U.S. 5,247,520) hereinafter referred to as Geise.

As per claims 18, 36, and 40, Endicott teaches: a hash map (lines 56-59 of column 2) and removing the reference to the connection object from the hash map (lines 4-9 of column 3).

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Endicott does not explicitly teach: starting a timer responsive to conclusion of a communication process using the connection. However, Howes discloses: "The timer field is used to time out a connection object when no activity occurs on the connection for a specified period of time," (lines 10-12 of column 14). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to start a timer responsive to conclusion of a communication process using the connection. "While the standby Local Director is inactive, it does not handle packets for connections and so none of the connection object timers in the standby Local Director are updated when connection activity occurs. Thus, many of the connection objects on the standby Local Director would be timed out. By updating the timer field to the current time when the standby Local Director becomes active, the connection objects are all preserved and are not timed out until a time out period expires beginning from the time that the standby Local Director becomes active," (lines 12-23 of column 14 in Howes). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to start a timer responsive to conclusion of a communication process using the connection in the system as taught by Endicott.

Endicott does not explicitly teach: removing the reference responsive to conclusion of a predetermined time period measured by the timer. However, Howes discloses: "In one embodiment, connections are timed out periodically and deleted when the recorded time in timer 362 differs from the current time by more than a determined amount," (lines 24-27 of column 9). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to remove the reference

responsive to conclusion of a predetermined time period measured by the timer. "The timer field is used to time out a connection object when no activity occurs on the connection for a specified period of time. While the standby Local Director is inactive, it does not handle packets for connections and so none of the connection object timers in the standby Local Director are updated when connection activity occurs. Thus, many of the connection objects on the standby Local Director would be timed out," (lines 10-18 of column 14 in Howes). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to remove the reference responsive to conclusion of a predetermined time period measured by the timer in the system as taught by Endicott.

Endicott does not explicitly teach: adding a reference to a connection object for a connection to a weak hash map and a hash map. However, Geise discloses: "LCB 62 also contains pointers to two hash tables 76 and 78. Table 76 is an ALS.sub.-- ID hash table, and table 78 is a CONNECTION.sub.-- ID hash table," (lines 64-66 of column 5). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to add a reference to a connection object for a connection to a weak hash map and a hash map. "Each valid entry in both has tables 76, 78 contains a pointer to one VCCB (dashed lines). Each hash table 76, 78 must have at least as many entries as the maximum number of logical links which can be handled simultaneously over the physical link represented by LCB 62," (line 66 of column 5 through line 3 of column 6 and Fig. 5). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to add a reference to a

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connection object for a connection to a weak hash map and a hash map in the system as taught by Endicott.

9. Claims 19 and 37 rejected under 35 U.S.C. 103(a) as being unpatentable over Endicott, Howes, de la Salle, and Geise as applied to claims 18 and 36 respectively above, further in view of Weinstein et al. (Google Groups comp.lang.java.databases) hereinafter referred to as Weinstein.

As per claims 19 and 37, Endicott teaches: determining whether the connection object has been destroyed (lines 47-52 of column 7 and lines 44-47 of column 14); removing the reference to the connection object from the weak hash map if the connection object has been destroyed (lines 56-59 of column 2, lines 24-33 of column 3, and lines 33-50 of column 14).

Endicott fails to teach: maintaining the reference to the connection object if the connection object has not been destroyed to thereby allow use of such connection object by a subsequent communication process between the client and server without establishing a new connection between the client and server. However, Weinstein discloses: "From that driver, the client obtains a JDBC connection object which communicates (only) with the WebLogic Application Server already running in another JVM. This server may already be handling other clients in the same or a different way. This server will be running after this an(d) any other clients have finished and are gone," and "It can either provide JDBC connection pools, or retain a client-specific DBMS connection so a client can retain transactional state during repeated log-

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ins/outs," (both from page 12 of 16). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to maintain the reference to the connection object if the connection object has not been destroyed to thereby allow use of such connection object by a subsequent communication process between the client and server without establishing a new connection between the client and server. "All this is configurable/alterable by the client using WebLogic extensions to JDBC. The Application Server connection pools can allow JDBC access to 3-tier clients who needn't transmit, know, or find out the DBMS password, or location. In 4.0, client code can create, manage, disable, re-enable, and destroy pools in the middle tier, dynamically. The middle tier and 3-tier driver can communicate via several client-selectable protocols, including secure protocols that can cross third-party firewalls. The middle tier also provides integrated security for all this.

There we are. Three well defined and physically distinct, independent, separately running tiers. Each providing specific business value added to the JDBC proposition, and WebLogic extensions to JDBC to allow JDBC/T3 clients to configure the behavior of the middle tier with regards to JDBC for the client," (page 12 of 16 in Weinstein). It is for this reason that one of ordinary skill in the art at the time of the applicant's invention would have been motivated to maintain the reference to the connection object if the connection object has not been destroyed to thereby allow use of such connection object by a subsequent communication process between the client and server without establishing a new connection between the client and server in the system as taught by Endicott, Howes, and Geise.

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***Response to Arguments***

10. Applicant's arguments filed 06 December 2005 have been fully considered but they are not persuasive.

11. (A) Regarding claim 1, the applicant contends that none of the reference teach or suggest: responsive to conclusion of a predetermined time period measured by the timer, maintaining a weak reference to the connection object. The examiner respectfully disagrees.

As to point (A), the applicant argues particularly that Howes does not teach: "maintaining a weak reference to the connection (responsive to conclusion of a predetermined time period measured by the timer)." The examiner points to the cited portion of Howes (lines 10-12 of column 14) which discloses: "The timer field is used to time out a connection object when no activity occurs on the connection for a specified period of time." The examiner also points to lines 24-36 of column 14 which discloses: "Thus, the active Local Director need not send packets to the standby Local Director indicating connection activity in order to prevent the standby Local Director from timing out connection objects. The standby Local Director does not time out connection objects and only deletes connection objects when a replication packet is received from the active Local Director indicating that a connection object has been deleted. In some embodiments, a very long time out period may be specified to get rid of connection objects that were not deleted as a result of some error. This system minimizes the requirement on the active Local Director to send information to the standby Local

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Director.” This clearly teaches the limitation of maintaining a weak reference to the connection object responsive to conclusion of a predetermined time period measured by the timer.

12. (B) Regarding claim 2, the applicant contends that none of the cited reference teach or suggest the claimed feature of “determining whether a normal reference to the connection object exists; and reusing the connection if the normal reference exists.”

The examiner respectfully disagrees.

As to point (B), the applicant argues that the cited portion of Endicott has nothing to do with any type of connection. The applicant is reminded that dependant claims contain all the limitations of their respective parent claims. Therefore, claim 2 contains all of the limitations of claim 1. As such, the arguments presented by applicant in regards to determining whether a normal reference to the connection object exists; and reusing the connection if the normal reference exists have already been addressed in the rejection of claim 1 (point (A) above) and is thereby included in the rejection of claim 2.

13. (C) Regarding claim 4, the applicant contends that none of the cited references teach or otherwise suggest the claimed feature of “determining whether a weak reference to the connection object exists. The examiner respectfully disagrees.

As to point (C), the applicant argues that Endicott does not teach a connection object. The examiner points out that de la Salle was cited for this limitation which reads:

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"In order to create the connection object 80, the transport decode routine 90 utilizes a hash table based on a pair of matched endpoint addresses appearing in the same captured packet 22'. These can either be a pair of network addresses 23 or a pair of board addresses 36'. The connection object 80 is an identified and separately "named" (numbered) object representing a link between two defined endpoints. For example, a particular captured packet 22' may involve a print spool request from Joan's PC (24) to a printer control server (32), designating an item for printing on an associated dot matrix printer. A connection object 80 would then be created and identified ("named") which would indicate a "connection" between Joan's PC and the printer server, (lines 38-50 in column 8). See also line 62 of column 8 through line 17 in column 9 in de la Salle.

14. (D) Regarding claim 4, the applicant contends that none of the cited references teach or otherwise suggest the claimed feature of "determining whether the connection object has been destroyed if the weak reference (to the connection object) exists." The examiner respectfully disagrees.

As to point (D), the applicant again argues that Endicott does not teach a connection object. See point (C) above.

15. (E) Regarding claim 7, the applicant contends that none of the cited references teach or otherwise suggest the claimed feature of "sending notification to the server that the connection object is unreferenced when a weak reference to the connection object is maintained." The examiner respectfully disagrees.

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As to point (E), the applicant again argues that Endicott does not teach a connection object. See point (C) above.

16. (F) Regarding claim 7, the applicant contends that the passage cited in rejecting the claim does not describe any step of sending anything to a server such as a notification as claims. The examiner points to lines 33-43 of column 14 in Endicott which discloses: "Various modifications may be made to the above-described embodiments consistent with the invention. For example, a weak reference may be placed on a queue by the collector when its reference is cleared, which would act as a notification to a program thread that the weak reference has been cleared. Also, while processing the weak references, the collector may be configured to clear only a portion of the weak references, e.g., based upon memory or paging considerations. In such a case, the collector would be required to resuming tracing from the referenced objects for weak references that were not cleared." This clearly teaches sending notification to the server that the connection object is unreferenced when a weak reference to the connection object is maintained.

17. (G) Regarding claims 6, 8, 13, 15, 25, and 33, the applicant's arguments are directed towards limitations disclosed in claims 1 and 4 which have been addressed above in point (A) and point (C).

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18. (H) Regarding claims 18, 36, and 40, the applicant contends that none of the cited references teach or otherwise [suggest] receipt of a communication object for which a reference is then added to two different hash maps – a weak hash map and a hash map. The examiner respectfully disagrees.

As to point (H), the applicant argues that the cited references do not teach or suggest the claimed feature which advantageously allows for the connection, upon expiration of the timer, to either be re-used or re-claimed. The examiner points to the previously cited Geise reference which teaches multiple hash tables: "LCB 62 also contains pointers to two hash tables 76 and 78. Table 76 is an ALS.sub.-- ID hash table, and table 78 is a CONNECTION.sub.-- ID hash table. Each valid entry in both has tables 76, 78 contains a pointer to one VCCB (dashed lines). Each hash table 76, 78 must have at least as many entries as the maximum number of logical links which can be handled simultaneously over the physical link represented by LCB 62," (line 64 of column 5 through line 3 of column 6 and Fig. 5). This clearly shows that the prior art contained multiple hash maps.

19. (I) Regarding claim 19, the applicant argues that the examiner is using improper hindsight analysis in rejecting claim 19. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the

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claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

20. (J) Regarding claim 19, the applicant contends that none of the cited references teach or otherwise suggest the claimed feature of "determining whether the connection object has been destroyed." The examiner respectfully disagrees.

As to point (J), the applicant again argues that Endicott does not teach a connection object. See point (C) above.

21. (K) Regarding claim 19, the applicant contends that none of the cited references teach or otherwise suggest the claimed feature of "maintaining the reference to the connection object in the weak hash map if the connection object has not been destroyed to thereby allow use of such connection object by a subsequent communication process between the client and server without establishing a new connection between the client and server." The examiner respectfully disagrees.

As to point (K), the applicant again argues that Endicott does not teach a connection object. See point (C) above.

22. (L) Regarding claim 19, the applicant contends that the cited Weinstein reference is non-enabling. The examiner disagrees.

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As to point (L), the Weinstein reference qualifies as prior art and has been available to the public since January 1999.

***Conclusion***

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Boucher et al. (U.S. 6,247,060 B1) discloses reusing connection objects.

Coile et al. (U.S. 6,317,775 B1) discloses connection objects in hash tables.

Quinlan (U.S. 6,338,089 B1) discloses reusing connections through session pools.

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Smith (U.S. 6,414,610 B1) discloses reusing connections by maintaining a free connections list.

Goldberg et al. (U.S. 6,434,543 B1) discloses handling connection objects in a JDBC system

Spence et al. (U.S. 6,487,581 B1) discloses connection instance objects in hash tables for retrieving data.

Cano et al. (U.S. 2005/0278726 A1) discloses connection objects in hash tables and linked lists.

Tuttle et al. (U.S. 2006/0031282 A1) discloses connection objects in hash tables.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Meucci at (571) 272-3892. The examiner can normally be reached on Monday-Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell, can be reached at (571) 272-3868. The fax phone number for this Group is 571-273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [michael.meucci@uspto.gov].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record

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Art Unit: 2142

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*Beatriz Prieto*  
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